

therewith from the outside of the apparatus. For example, the apparatus 10 retrieves various data which is distributed from the server 40 on the network such as Internet or the like by using the communication I/F unit 12 through a communication line such as ISDN, telephone line, or the like or a broadcasting line such as CATV, BS, CS, or the like. Data recorded on the music piece discs 50 such as various CDs, MDs, or the like can also be read and fetched into the apparatus by using the disc input unit 13.

When those data are retrieved, the music piece data managing apparatus 10 forms memory addresses showing storing positions of the fetched music piece data on the hard disk 17 of the music piece data managing apparatus 10 and stores them onto the hard disk 17 together with the fetched music piece data and the data associated therewith.

In this case, the management data is constituted by the memory addresses and the data associated with the music piece data.

As a storing process on the hard disk 17, data are additionally writable. After the obtained data has been stored once, each time the data is obtained from an external source such as a server 40 or the like, it is successively written onto the hard disk 17.

The data stored on the hard disk 17 can be copied onto the hard disk 25 built in the in-vehicle audio information reproducing apparatus 20. As mentioned above, the hard disk 25 of the in-vehicle audio information reproducing

apparatus 20 is detachable from the apparatus main body and it can be removed from the main body of the apparatus 20 and placed near the music piece data managing apparatus 10.

In the state of the setting mentioned above, by connecting both of the hard disks 17 and 25 by using, for example, a USB (Universal Serial Bus) interface or an Ir (Infrared Rays) link interface, the data stored on the hard disk 17 can be easily copied onto the hard disk 25.

After completion of the copying process of the storage data, by reloading the hard disk 25 into the main body of the stored apparatus 20, that is, by returning it to the loading state before this disk is removed, the in-vehicle audio information reproducing apparatus 20 can reproduce the music piece data stored onto the hard disk 17 of the music piece data managing apparatus 10.

A storage format of the music piece data and the management data onto the hard disk 17 of the music piece data managing apparatus 10 and a state of copying the storage data onto the hard disk 25 of the in-vehicle audio information reproducing apparatus 20 are shown in the structural diagram of Fig. 4 that illustrates the storage data format.

As shown in Fig. 4, in the embodiment, the management data, which is stored onto the hard disks 17 of the music piece data managing apparatus 10, comprises addresses showing the storing positions of the music pieces, names of the music pieces, names of artists, and genres to which the

music pieces belong. The artist names and the genres to which the music pieces belong are presented by the so-called text data that represents the attributes of the music piece data.

In Fig. 4, although there is shown that 1st to 4th address data are displayed, the embodiment is not limited to such an arrangement. It is also possible to select any number of addresses which the user desires to handle and copy the data stored in the data managing apparatus 10 onto the hard disk 25 of the in-vehicle audio information reproducing apparatus 20.

Subsequently, the forming operation of the reproducing order data for determining the order of reproduction of the music pieces stored onto the hard disk will be described.

In response to an input instruction from the keyboard 14, the control part 11 of the music piece data managing apparatus 10 executes an editing process for forming the reproducing order data of the music piece data stored onto the hard disk 17. An example of the editing process is shown in Fig. 5.

The editing process is executed by a method whereby the attribute data showing the music piece names, artist names, and music piece genres included in the management data and the memory addresses on the hard disk are rearranged, for example, in the order of reproduction which the user desires by using the memory addresses as a reference and edition numbers showing the order of